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ABSTRACT

The great disparity in the geographic and specialty distribution of health manpower, particularly physicians, and strategies to resolve the maldistribution problems are addressed. Rural areas do not have an adequate supply of qualified health manpower, and almost one-third of the nation's critical health manpower shortage areas are in southern states. Data are presented on the ratios of physicians to civilian population and the percentage of physicians in primary medical care. Strategies for influencing the distribution of physicians are directed to the selection and education of medical students and residents in training, and others relate to fiscal policies and community recruitment activities after training. Strategies involve money, policies and procedures, program development, or changes in laws. The state government holds the power to modify licensure laws, provide scholarships and loans, fund residency training programs in family practice, fund Area Health Education Centers, and influence reimbursement schedules. A combination of policies and incentives coordinated in an overall plan by the state is needed to deal with the problems of physician distribution. (SW)

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Influencing the Distribution of Physicians: Manpower Policy Strategies

An estimated 35 million Americans live in rural areas with a shortage of physicians and other health professionals. In recent years, national health policy has been concerned with both the supply and distribution of health manpower. But, as the decade ends, there is increasing agreement that most health manpower shortages have been corrected in large part—either in terms of the number of individuals in the work force or those who will soon be graduating and taking their place in the work force. What does remain, however, is a great disparity in the geographic and specialty distribution of health manpower, particularly physicians.

As a result, national policy has shifted from increasing the total supply of manpower to improving the distribution of health professionals for the purpose of bringing about a better distribution of all health services. In this context, it is important to note that simply having sufficient numbers of health manpower available does not assure adequate delivery of health services to all segments of society. For example, inner city areas have been cited frequently as locales suffering from a lack of non-emergency, day-to-day health care, even though metropolitan areas taken as a whole have achieved or exceeded numbers of health manpower deemed adequate by conventional measures.

While there is a concern for various kinds of health manpower, the emphasis in this paper will be on physicians, since they are the main emphasis in health care delivery and to a great extent determine what services and other health manpower are needed. The focus will be on how various policy groups, notably state government and the academic health centers, can influence the distribution of physicians within a given state.

Nature and Extent of the Problem

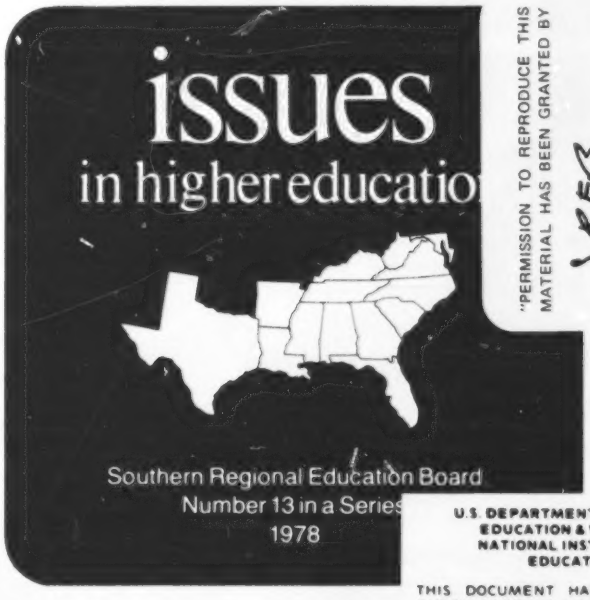
One reason for the increased emphasis on maldistribution of health professionals is our escalating social concern that everyone have access to health care. There is also a sense among many in the population that there is a right to access to care because so many tax dollars go into the training of health professionals.

A growing concern has developed among some political representatives that the medical education process has been unresponsive to the needs of the public, particularly in rural access to medical care. An increasing proportion of higher education dollars is being directed to medical education, without a perceived corresponding result in rural access to physicians.

The reasons it is difficult to attract qualified health manpower to rural areas are not surprising. Health personnel, as professionals in other fields, are generally not attracted to and do not remain in areas that are economically depressed, geographically remote, and sparsely populated. They are concerned about good schools, recreation, and cultural opportunities. Poverty rates are higher and private health insurance coverage is more limited in rural areas. Even with a greatly increased emphasis on programs to solve the distribution problem, there are likely to be some rural areas that will remain medically underserved due to geographic isolation, low population density, or a number of other factors.

The data on maldistribution of physicians is relatively well known. The nation has gone from 121 active non-federal physicians per 100,000 population in 1949 to 163 per 100,000 in 1976. The ratio ranges from a low of 82 per 100,000 in Alaska to a high of 234 in New York. In the SREB states, all the states except Maryland still have ratios lower than the national average. The physician-to-population ratios for the South range from a low of 92 per 100,000 in Mississippi to a high of 217 per 100,000 in Maryland, as shown in Table 1.

Until recently the major thrust of federal and state governmental programs to support medical education has been toward the training of more physicians, in the hope and expectation that by increasing the supply, the shortages in various geographical and specialty areas would correct themselves as a result of normal market forces. Thus, both federal and state governments have increased financial support for medical schools, encouraged the development of new medical schools, and increased the enrollments in existing medical



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schools. In the nation as a whole, there are now nearly twice as many physicians graduating each year as there were 12 years ago.

The Southern region also has dramatically increased the number of physician graduates from its schools in the last decade. Since 1970, 10 new medical schools have opened or are in the process of opening in the region. This is half of all the new medical schools in the nation during this time. Even so, the physician-to-population ratio in all Southern states except Maryland is still lower than the national average. In addition, almost one-third of the nation's critical health manpower shortage areas, as defined by the federal government, are found in Southern states.

Table 1

Physicians to Civilian Population Ratios, 1970 and 1976

	Physicians [a] per 100,000 Population		Relative Increase
	1970	1976	1970-76
Alabama	85	104	22%
Arkansas	85	101	19
Florida	127	161	27
Georgia	103	125	21
Kentucky	98	133	36
Louisiana	115	133	16
Maryland	174	217	25
Mississippi	79	92	16
North Carolina	105	131	25
South Carolina	87	113	30
Tennessee	114	140	23
Texas	111	134	21
Virginia	117	145	24
West Virginia	98	125	28
SREB States	111	138	24
United States	139	163	17

[a] Active non-federal physicians

Source: HEW, Public Health Service, Health Services and Mental Health Administration, *Health Resources Statistics, 1971*; American Medical Association, *Physician Distribution and Medical Licensure in the United States, 1976*, Chicago, 1977.

Eva C. Galambos, *Law, Medicine, and Veterinary Medicine: Issues in Supply and Demand*, (Atlanta: Southern Regional Education Board, 1978) p. 9.

At present, there are approximately 100,000 physicians in training nationally—either in medical schools, internships or residencies—which is about one-third as many physicians as there are in active practice today. This increased supply of medical manpower is the largest in the nation's history, and more are on the way at the same or a greater rate of production now that this medical training "pipeline" is in place and operating. The current rate of production of physicians is causing great concern on the part of some health economists, who conjure up visions analogous to the sorcerer's apprentice, since each physician may generate about $250,000 in health costs each year.

When the physicians now in the training pipeline enter practice, they will have a great influence upon the number of physicians in the work force. Large questions remain as to where these physicians will locate their practices.

Beside the problem of geographic maldistribution of physicians, there is also concern for distribution of physicians by specialty. Geographic and specialty distribution are related, since it is more difficult for sparsely populated areas to support highly specialized physicians. It has been assumed that by increasing the supply of primary care physicians, a greater number of the physicians would establish practices in rural areas. In the last several years, the federal government has instituted a number of programs designed to increase the supply of M.D.'s, emphasizing in particular primary care physicians—family practitioners, internal medicine specialists, pediatricians, and obstetricians—who are the first point of contact for patients and families.

Despite national policies to strengthen primary care, presently only about 45 percent of physicians entering practice are in the four primary care areas. These physicians over the years have constituted a declining proportion of the total entering practice. This trend appears to be reversing (see Figure 1).

Even though much of the South is predominantly rural, the major proportion of the population is still within 50 miles or so of substantial and sophisticated medical services. It appears that the major concerns for health care among rural residents center around the need for primary care services and care for everyday illnesses. Basic health care services and reassurance are sought far more frequently than highly sophisticated diagnosis and treatment. These types of services have implications for greater use of primary care physicians along with an increasing number of physician assistants and nurse practitioners.

Many of our nation's health care efforts have been based on the assumption that access to health care creates a healthier population. However, as some researchers have pointed out, most of the demonstrable improvements in our nation's health have come not from personal medical care services, but from such public health measures as waste disposal, immunization, water purification, and better nutrition. While it may be safe to say that, up to a certain point, health manpower helps produce a healthier population, beyond that point there is little demonstrable evidence that increasing the numbers of health manpower or visits to physicians will improve the health of the population.

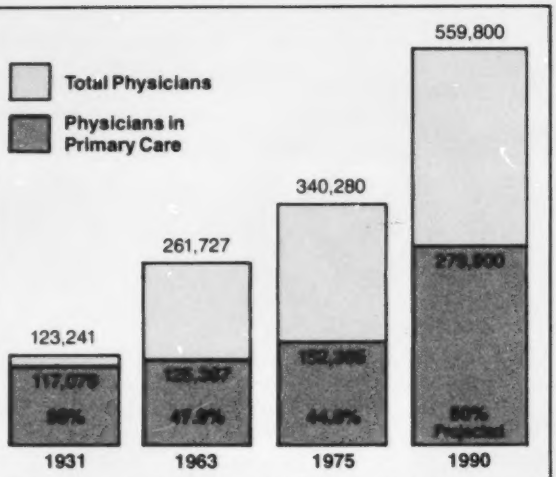
Factors Affecting Distribution of Physicians

There are many economic, social, and professional factors that influence where health professionals decide to locate their practices (see Table 2). Research studies have identified a number of these factors and trends.

Physicians are more likely to locate in areas that are growing economically than in declining areas. Because of the relative saturation of physicians in large cities, new physicians appear to be moving away from the largest urban centers, but they tend to go to smaller urban centers rather than to rural areas. Current practitioners indicate that ready accessibility to hospitals with sophisticated equipment and easy access to continuing education are significant factors in

Figure 1

Percentage of Physicians in Primary Medical Care*



*Primary care physician is one who either first treats a patient or oversees the patient's treatment by a specialist.

Source: National Academy of Sciences, Institute of Medicine

Table 2

"Expert" Opinion of the Most Important Factors Influencing the Location Decisions of Established Practitioners and Students

Factor	Current Practitioners Final Rank	Students Final Rank
Spouse's attitude	1	5
Available facilities	2	12
Availability of peer professional manpower	3	11
Potential for rapid practice growth	4	3
Community orientation of practice	5	6
Activities for spouse	6	8
Preference for small community and culture	7	1
Availability of group practice	8	4
Close (one hour) proximity to a major cultural and shopping center	9	10
Assistance in cost of capital investment of practice establishment	10	7
Recreational activities	11	16
Location of residency	12	9
Rural preceptorship for students with rural background (this was judged to be of no value for students from urban areas)	—	2

Source: Richard M. Grimes, Joel M. Lee, Lewis A. Lefko, and F.M. Hemphill, "A Study of Factors Influencing the Rural Location of Health Professionals," *Journal of Medical Education*, Vol. 52, September 1977, p. 772.

determining the practice location of physicians. Where a physician is born and reared also seems to have some effect in choice of practice location. Physicians from rural backgrounds are more likely to settle in rural areas, although not necessarily their home area. Even so, the majority of physicians who were reared in rural areas still choose urban practice locations but, as a group, they are more likely to choose a rural practice than physicians who have been reared in urban settings.

Primary care physicians are more likely than specialists to choose a rural practice, and most rural locations can more easily support primary care physicians. The fact that a higher proportion of the medical graduates are now headed for primary care practice does not in itself make them interested in a rural practice. There is still the likelihood that most primary care graduates will end up in the affluent suburbs of large urban areas or in smaller urban areas. Thus, specific incentives and policies are needed to influence a better distribution to rural areas.

Economic disincentives, such as the fact that insurance companies, Medicaid and Medicare provide a higher rate of reimbursement for services in urban than in rural settings, have a negative effect on encouraging physicians to locate in rural areas.

Strategies to Resolve the Problem of Maldistribution

There are a number of possible strategies for influencing the geographic distribution of physicians. Perhaps more of these options are available to state governments than to any other segment of society, although the federal government, the medical schools and communities themselves can help, and in some cases, must be the primary actors. In any case, the best results are likely to be obtained when there is cooperation among all of these parties. However, it is state government that holds the power to modify licensure laws, to provide scholarships and loans, to fund residency training programs in family practice, to fund Area Health Education Centers and to influence reimbursement schedules.

Some of the strategies depend on incentives to influence the practice choices of young physicians; others have elements of coercion. Most persons would favor incentives rather than mandates whenever possible. Incentives are more consistent with our society's values about free choice, and they result in better outcomes when they work. However, like other professionals, physicians resent being penalized for doing work that requires personal and family sacrifices, or being coerced into specific patterns of practice. Incentives providing for fair, adequate rewards for their work, personal recognition, professional freedom and opportunities for their families can be expected to be effective in a large proportion of these individuals. At the same time, there is a feeling by some segments of the public and their representatives that certain approaches have been too permissive. Some feel a need to tighten up and increase the penalties and consequences of taking large amounts of public monies for the support of one's education and then not meeting the public's expectation for services.

Several strategies for influencing the distribution of

physicians are directed to the selection and education of medical students and residents in training; others relate to fiscal policies and community recruitment activities after physicians are already trained. Studies have shown that all are significant, but the approaches directed to the medical student and resident are likely to have greater impact than those directed to physicians who have already completed their training.

Many of the strategies involve money (e.g., student loans, reimbursement rates), but others involve policies and procedures (e.g. admissions policies, curricular modifications, more effective community recruitment), the establishment of different kinds of programs (e.g., Area Health Education Centers, rural preceptorships), or changes in laws (e.g., licensure laws). It is unlikely that any one effort by itself will be entirely successful, but a sophisticated combination may be quite effective (e.g., a combination of selective admission of rural area students, scholarship loans, rural preceptorships with coordinated counseling at each step of the process, along with changed reimbursement schedules, and community recruitment).

Some of the strategies involve the removal of disincentives rather than the establishment of positive incentives. While such steps may not in themselves influence physicians to practice in rural areas, they will at least remove some of the present impediments to rural practice.

Factors in Physician Training

In considering various approaches to resolve the problem of maldistribution of physicians, such strategies may be separated into those efforts that occur during the training of physicians and those that occur once the physician is in practice. Clearly, those that have the greatest potential occur during the training period.

Residency Training

The availability of high quality residency training in the state is perhaps the predominant factor that influences whether a given state will have a net influx of physicians or whether the state will be a net exporter, graduating more physicians than establish practice in the state. Studies show that where physicians take their residency training has a greater effect on their place of practice than where they attend medical school. The availability of primary care residencies is thus of considerable importance in affecting the geographic distribution of physicians.

A number of states are now supporting family practice and other primary care residency training programs. This appears to be a trend that will increase in the future and should result in better distribution of physicians within any given state. By providing state funds to support primary care residency training, the state is able to influence the number and location of spaces, to require admissions policies for residency spaces that favor in-state residents, and to provide stipends that may be high enough to influence the choices of physicians for both the kind and location of practices.

Area Health Education Centers

The Area Health Education Center (AHEC) is an arrangement that links health service organizations and educational institutions in a way that serves both the student and the surrounding community. University health science centers join with one or more hospitals some distance away to provide education and training in areas seriously needing health manpower (see Figure 2).

Area Health Education Centers appear to ease the problem of professional isolation, one of the major drawbacks associated with rural practice. AHECs in rural areas train medical residents and other health professions students, in addition to providing the practicing physician contact with an academic health center and continuing education. The AHECs serve as a way of exposing students to primary care practice in rural settings, while at the same time offering local physicians the opportunity to keep up to date on new knowledge and skills. Most studies agree that the presence of AHECs provides positive influence for physicians to locate in those areas.

For an AHEC to be viable, the geographic area must have a sufficient population base, yet be small enough so that the community has reasonable access to the AHEC. The AHEC must also provide continuing education programs that are seen as valuable to health professionals who practice in the surrounding communities.

AHECs are most likely to influence those physicians who choose a practice location for primarily professional reasons, rather than for the social amenities offered by urban settings. Although AHECs appear to be promising in their ability to influence the geographic distribution of physicians, they do not offer a guarantee of success in and of themselves. Some rural areas are not able to support an AHEC, and the financial requirements may cause some states to delay initiating them.

Loan Forgiveness and Scholarship Programs

Loan forgiveness and scholarship programs have been in existence at both the federal and state levels for a number of years. They have met with mixed success. In general, the loans are given to students who agree to serve in a designated area, usually either a given state or a rural area identified as a health manpower shortage area. The loan is forgiven for graduates who fulfill the contract. Otherwise, graduates must pay back the loan with interest. Until recently, most of the federal loan forgiveness programs have met with poor success, since only about one out of seven of the loan recipients actually served in federally-designated shortage areas. Recently, however, the National Health Services Corps (NHSC) has been having much greater success with recipients of NHSC loans going to work in shortage areas. With state loan forgiveness programs, the success has been better, with over 40 percent of those who received loans providing service in shortage areas.

Some studies have indicated that physicians with small town origins are more likely to repay their loans by service than those who have lived only in urban areas. This has led some to suggest that service repayment rates would be higher if loan recipients were selected from towns not greater than 10,000 residents. Others have recommended that loan programs should finance the full cost of a student's medical education and give physicians a reasonable choice of practice locations. In some places with state scholarship programs, as many as 65 percent of those receiving scholarship loans by the state have paid them off in service in the state. It should

not be surprising that relatively small loans (e.g., around $5,000) are not very influential in altering a physician's location decision. By making larger loans available and increasing the payback interest rate, more physicians may be influenced to choose rural service to repay the loan. Also, a combination of preferential admissions for students from rural backgrounds *and* making loans to these candidates is likely to make loan forgiveness programs more effective.

Sinclair Coleman, a Rand Corporation researcher, found that receipt of a forgiveness loan strongly affects the probability of rural practice among primary care physicians, but does not affect practice locations for those involved in non-primary care. The general demand for loan and scholarship funds is increasing, giving encouragement for the possibility of increasing the effectiveness of these programs.

Another important trend which tends to support loan forgiveness programs is the fact that medical school tuition is rapidly increasing in both public and private institutions. Future federal government initiatives are expected to provide medical school support to selected students rather than through capitation grants to the medical schools, as has been the case in the past. If this is so, then increasing tuition will force a greater proportion of medical students to accept loans for their education, and thus provide greater leverage for them to pay back the loans in the form of rural practice.

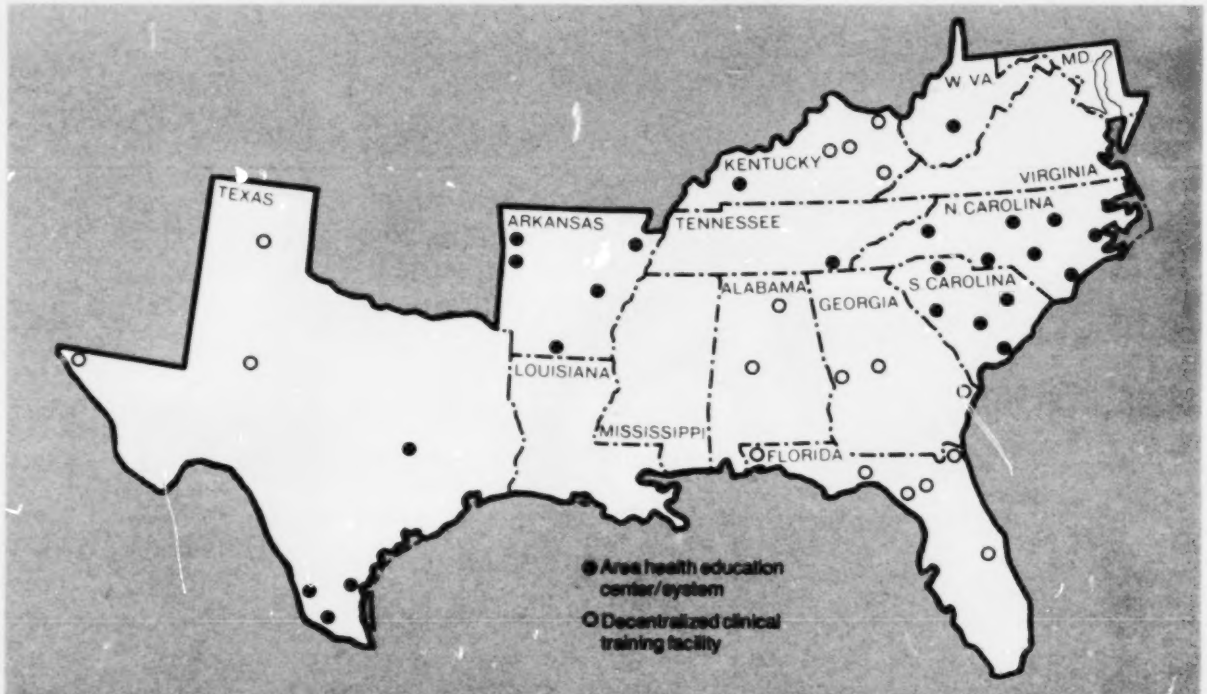
Preferential Medical School Admissions

Much attention has recently been focused upon preferential admissions of applicants from rural areas to medical schools. The policy of preferential admissions has long been followed in state-supported medical schools where in-state residents are given preference in admissions. The premise underlying such a policy is that medical students who grow up in a state and go to school in that state are more likely to practice there than are out-of-state students. This conclusion has been supported by research studies, although the availability of graduate medical education opportunities (internships and residencies) in the state appears to be an even more important factor in holding physicians in a state.

The recent pressure has been to give preferential admissions to applicants from rural areas within a state in the belief that this will increase the likelihood of those physicians practicing in rural areas once their medical education has been completed. Studies, such as another Rand Corporation study done by Heald, Cooper, and Coleman, have indicated that rural-reared physicians are three times more likely to choose a rural practice than are urban-reared physicians. Other studies have found that physicians who were reared in communities of fewer than 25,000 population practice in such areas, as compared to physicians who were reared in cities of over 300,000 population. Also, it has been found that

Figure 2

AHEC s in the SREB Region



Existing area health education centers, area health education systems, and other decentralized clinical training facilities. AHECs that lack affiliation with a university health science center are not included.

Adapted from *Progress and Problems in Medical and Dental Education*, a report of the Carnegie Council on Policy Studies in Higher Education, 1978.

three times as many physicians who were reared outside of a Standard Metropolitan Statistical Area (SMSA) practice there, compared to physicians raised in metropolitan areas.

In a study by Frank Sloan of Vanderbilt University and Donald Yett, a "BMIR" scale was developed where "B" indicated where the individual was born, "M" where he attended medical school, "I" where the internship was taken, and "R" where the residency training was taken. As the number of BMIR events which occur in a single state increases, the greater is the likelihood that an individual will remain in that state. In addition, the most recent events (internship and residency training) have greater effects than the earlier events. Other studies have found that most practice location decisions are made while the individual is in the residency years.

Another issue regarding preferential admissions concerns minority candidates, especially blacks. Between 1969 and 1977 the number of minority-group students in medical schools nearly tripled, but the proportion of minority enrollment to total enrollment remained virtually unchanged. Blacks who were accepted to medical school have experienced higher attrition rates than other students. Future increases of black students in medical schools will hinge largely on efforts to increase the pool of qualified black applicants.

With the controversy over preferential admissions policies resulting from the Bakke case, medical schools are likely to be cautious about giving preferential admission to any group. The U.S. Supreme Court has held that some preferential admissions are desirable. However, these policies must be flexibly and sensitively administered. Care must be exercised so that possible legislative and other initiatives do not destroy the ability of the individual institution to deal effectively with preferential admissions.

Undergraduate Medical Education

Changes in undergraduate medical education have also been proposed as a means for influencing the geographic and the specialty distribution of physicians. This proposal has resulted from the orientation of medical schools to highly scientific and technological professional education, and from the nature of the medical education process which creates dependence upon sophisticated medical centers to support medical practice, particularly in the highly technological specialties. One suggested strategy has been to modify the premedical and medical school curriculum. The recent Institute of Medicine study of primary care recommends that the medical school curriculum should include the behavioral and social sciences and also provide students with clinical experience in primary care settings. Others have suggested restructuring of courses to better deal with human values and to increase the emphasis on prevention of illness and the behavioral aspects of health in contrast to the present emphasis on biomedical treatment and technology. Obviously this is a matter of relative emphasis, not of total change. This strategy will require influencing the medical school faculty who naturally gravitate toward increasing specialization. It is difficult for an outside group to influence decisions which are seen by medical school faculty as relating to their prerogatives and academic freedom, but these changes can be made from within the medical schools and their academic health centers if the need is clearly enough defined.

Rural Preceptorships

Medical preceptorships are assignments of medical students to selected community practioners during their clinical training years. Many persons favor the use of rural preceptorships in order to provide a proper role model for students who may wish to practice in rural areas, since it is hard for students to know the nature of such a practice when they have not had an opportunity to observe it. Studies of whether rural preceptorships influence physicians' practice location show mixed results. However, such relationships still may have other significant benefits in increasing the understanding and acceptance of primary care practice.

Factors in Physician Practice

Even after physicians complete their training, there are policies and incentives that can influence whether they will locate in rural areas and, more important, whether they will stay in rural areas.

Policies That May Affect Income

There are several policy options that may affect physician income. One of these involves establishing a reimbursement fee schedule that differentially favors rural physicians. Another policy option would be to guarantee rural physicians a minimum income. In addition, states or communities may supplement income for physicians beginning practice or provide offices or homes either free or at a reduced rate for a specified period of time.

A higher fee reimbursement schedule for physicians in rural areas would have a possible disadvantage in that many residents of rural areas would have to pay more for their health care because the proportion of persons without health insurance is substantially higher in rural areas than in metropolitan areas. Even though it may not be desirable for states, the federal government and insurance companies to set a reimbursement fee schedule that favors rural physicians, the present 20-25 percent discrepancy in reimbursement fees which favors urban physicians needs to be corrected.

The recent Institute of Medicine's study on primary care recommended that not only should geographic differentials in reimbursement fees be eliminated, but that differences in payment levels between primary care physicians' fees and specialists' fees should be reduced. The report also recommended that third party payments (private insurance and government Medicare and Medicaid) be made for health education and preventive services that are not currently reimbursable. A statewide fee schedule for reimbursement could eliminate the discrepancy between urban and rural physicians and might encourage more physicians to locate in rural areas.

National Health Service Corps

The National Health Service Corps (NHSC) is a federal program designed to improve the delivery of health services in "critical health manpower shortage areas." The National Health Service Corps recruits and assigns physicians, dentists, nurses, and other health personnel to the shortage areas which have been designated by the U.S. Public Health Service. School loans are available through NHSC which specify that the recipients must serve in health manpower

Strategies to Influence the Distribution of Physicians

1) Provide more quality opportunities for residency training in the state as a whole and in rural areas. Provide increased support for family practice residency programs.

2) Increase scholarship and loan forgiveness programs with corresponding increases in dollar amounts and penalties involved.

3) Establish a reimbursement system for rural practice that at least equals that for urban practice.

4) Give preferential admissions to residents of rural areas.

5) Alter the undergraduate medical education process, include rural preceptorships, provide greater emphasis on human and behavior factors and prevention of illness.

6) Establish or expand Area Health Education Centers and primary care residencies associated with them.

7) Review and revise licensure acts relating to physician assistants and nurse practitioners.

8) Provide support to community recruitment and retention efforts for health manpower.

shortage areas following completion of their education. Although the NHSC had large numbers of students pay back the money rather than work in shortage areas in the early years of the program, the percentage of graduates who serve their obligated period is now increasing. The NHSC is seen as an effective program for the delivery of services in critical health manpower shortage areas and in directing manpower to these areas.

Currently there are about 1,600 areas that have been designated as critical health manpower shortage areas. Approximately 500 are in the Southern states. Even though the National Health Service Corps is showing increasingly favorable results, many geographical areas are still either too small or too poor to ever be self-sufficient in supporting physicians.

Between 8,000 and 10,000 students are expected to apply for National Health Service Corps scholarships for the 1978-79 school year, of which about only 3,000 will receive NHSC loans. Following completion of education, students are required to pay back the loan in service at the rate of one year for each year of scholarship support, with two years of service as the minimum. The scholarships include tuition, fees and other educational expenses, plus a stipend of at least $429 per month.

State Government Regulations

State government can affect the health manpower distribution issue particularly through the development of policies related to medical services and through appropriate modification of licensure acts.

Concepts, such as restricted licensure that would limit the kind of specialties physicians could practice, thus forcing physicians into certain specialties, have been discussed. Most people feel that such a step is too coercive; they prefer instead positive incentives.

Providing for the licensure of physician assistants and nurse practitioners is one way to increase the delivery of health care services in rural areas. Current state laws often restrict the utilization of such personnel on the gounds that use of greater numbers of nurse practitioners and physician assistants might lower the quality of care being delivered. However, a number of research studies have shown that the quality of care has not been lowered by the use of such personnel. (The same holds true for dental hygienists and assistants as well.) Through better practice acts, state legislatures can greatly increase the use of non-physician personnel to deliver health care services. This is a policy alternative that should be considered in more depth.

At this time, most individuals who are knowledgeable about health manpower distribution still favor voluntary approaches for improving the distribution rather than strict government regulation. There is a belief that until various untried or unemphasized voluntary alternatives are tested, more stringent regulation should not be developed. A major fact which contributes to this belief is the still unknown effect of the some 100,000 physicians now in training. It may be that economic market forces which have not worked in the past to better distribute physicians may now disperse them to rural areas when this one-third increase of physicians is added to the labor market. The predominant speculation is that these forces will influence the distribution of physicians to smaller urban areas but still not to very remote areas. Other incentives and policies will very likely be necessary to achieve the goals of that distribution. No one factor, acting in isolation, is likely to solve the problem. What is needed is a sophisticated combination of incentives and some overall coordination of them.

Community Efforts

An important aspect of whether a physician chooses to locate in a rural location, and perhaps even more important, whether he chooses to remain in that location, is the attitude and support of the community. Some communities have been quite successful in recruiting and retaining physicians while others have been unsuccessful.

There are certain strategies that communities have used to attract and retain physicians, ranging from relatively simple public relations approaches to providing loans for begin-

ning practice, providing an office, and highlighting medical needs in the area. It has also been suggested that income supplements to guarantee physicians a basic income for some period of time might be helpful in attracting and retaining physicians. A number of organizations, such as the American Medical Association and state medical associations, have had programs designed to assist communities in attracting and retaining physicians. These programs have met with mixed success but indicate some promise that communities can do much for themselves in attracting and supporting physicians and other health professionals in their locale.

As indicated by Table 2, the attitudes and concerns of families are important determinants in whether a physician locates in a rural area. This includes concern for schools, recreation, and social opportunities. Communities should be aware of these factors in projecting their image to professionals who are considering locating there.

Summary

Approaches dealing with problems of physician distribution should not be unrelated to each other. Rather, policies and incentives to solve this problem must include a combination of strategies coordinated with each other, and related to an overall plan that can be directed by the state. States should give serious consideration to developing untried and sophisticated combinations of strategies to deal with the problems of health manpower distribution. While the specific combination of strategies and coordination will vary from state to state, the more incentives and strategies that are present in a given state, the greater will be the likelihood that better physician distribution will be achieved.

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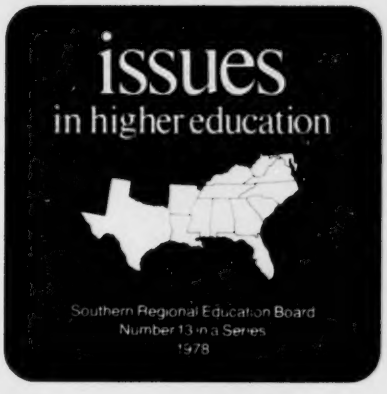

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